

1 CLAIMS

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3 We claim:
45 1. A method of capturing and monitoring at least one physiological parameter
6 and movement within an area of at least one person, the method comprising:

7 dividing the area into cells having respective location identifiers;

8 providing each person with a respective device for measuring at least
9 one physiological parameter of each person, the physiological parameter
10 being indicative of whether the person has a physical condition, each device
11 having a device identifier;12 at least intermittently measuring a physiological parameter of each
13 person using the respective device to obtain a physiological parameter reading
14 for each measurement;15 associating each of at least a selected number of the physiological
16 parameter readings with the respective device identifier of the device by
17 which, the respective location identifier of the cell in which, and a time at which
18 the physiological parameter reading is obtained; and19 storing the associated physiological parameter reading, device
20 identifier, location identifier and time.
2122 2. The method according to Claim 1, wherein the monitoring is carried out from a
23 remote location, the method further comprising:24 transmitting the associated physiological parameter reading, device
25 identifier, location identifier and time to the remote location prior to storing
26 them thereat.
2728 3. The method according to Claims 1 and 2, further comprising comparing the
29 physiological parameter reading with a first predetermined physiological parameter
30 threshold value to determine if the person is wearing the device properly.

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2 4. A method according to Claim 3, further comprising identifying and locating the
3 person using the device identifier and the location identifier associated with the
4 physiological parameter reading if the person is determined not to be wearing the
5 device properly.

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7 5. The method according to Claims 1-4, further comprising comparing the
8 physiological parameter reading with a second predetermined physiological
9 parameter threshold value to determine if the person has a physical condition.

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11 6. A method according to Claim 5, further comprising identifying and locating the
12 person using the device identifier and the location identifier associated with the
13 physiological parameter reading if the person is determined to have the physical
14 condition.

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16 7. A method according to Claims 5 and 6, wherein the second predetermined
17 physiological parameter threshold value is predetermined individually.

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19 8. The method according to Claims 3-7, further comprising adjusting the
20 physiological parameter reading by a physiological parameter correction factor that is
21 individually determined for the person prior to comparing the adjusted physiological
22 parameter reading with the first or the second predetermined physiological parameter
23 threshold value.

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25 9. The method according to Claims 6-8, further comprising:
26 matching a time and location identifier associated with at least one
27 physiological parameter reading taken from a respective device of at least one
28 other person with those of the identified and located person; and
29 identifying the other person to have been in physical proximity of the
30 identified and located person if there is a match.

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2 10. A system for capturing and monitoring at least one physiological parameter
3 and movement within an area of at least one person comprising:

4 a remote control unit; and

5 a plurality of access stations provided in a spatial arrangement within
6 the area, thereby dividing the area into respective cells, wherein each access
7 station has a respective station identifier, is connected to the control unit and
8 is adapted to receive a physiological parameter reading and a respective
9 device identifier from at least one physiological parameter measuring device
10 attached to a first person, and to transmit the received physiological parameter
11 reading and the device identifier along with its station identifier to the control
12 unit;

13 wherein the physiological parameter reading, device identifier, station
14 identifier and a time at which the physiological parameter reading is obtained
15 by the device are stored in a first record at the control unit.
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17 11. The system according to Claim 10, wherein the control unit is adapted to
18 compare the physiological parameter reading with a first predetermined physiological
19 parameter threshold value to determine if the first person is wearing the device
20 properly.
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22 12. The system according to Claim 11, wherein the control unit is further adapted
23 to provide information corresponding to the device identifier and the location identifier
24 associated with the physiological parameter reading for identifying and locating the
25 first person if the first person is determined not to be wearing the device properly.
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27 13. The system according to Claims 10-12, wherein the control unit is adapted to
28 compare the physiological parameter reading with a second predetermined threshold
29 value to determine if the first person has a physical condition.
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2 14. The system according to Claim 13, wherein the control unit is further adapted
3 to provide information corresponding to the device identifier and the location identifier
4 associated with the physiological parameter reading for identifying and locating the
5 first person if the first person is determined to have the physical condition.

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7 15. The system according to Claims 13-14, wherein the second predetermined
8 physiological parameter threshold is predetermined individually for the first person.

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10 16. The system according to Claims 11-15, wherein the physiological parameter
11 reading is adjusted to include a physiological parameter correction factor that is
12 individually determined for the first person prior to comparing the adjusted
13 physiological parameter reading with either the first or second physiological paramter
14 threshold value.

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16 17. The system according to Claims 14-16, wherein the control unit is adapted to
17 match a date, time and location identifier of at least another record obtained from
18 another respective device of at least one other person with those in the first record;
19 and to identify the at least one other person to be in physical proximity of the first
20 person if there is a match.

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22 18. The system according to Claims 11-17, wherein the control unit is adapted to
23 generate an alert message if the first person is determined either not to be wearing
24 the device properly or to have the physical condition, the alert message including
25 information corresponding to the station identifier and the device identifier.

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27 19. The system according to Claim 18, wherein the alert message is sent to a
28 predetermined recipient via a communication network to which the control unit is
29 connectable.

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1 20. The system according to Claim 19, wherein the communication network is a
2 public communication network.

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4 21. The system according to Claims 10-20, wherein the control unit is adapted to
5 instruct the device to transmit its device identifier and a physiological parameter
6 reading measured therewith.

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8 22. The system according to Claim 21, wherein the control unit is adapted to
9 instruct the device by broadcasting a corresponding instruction via at least one
10 selected access station, the instruction being receivable by all devices in a coverage
11 area of the at least one selected access station.

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13 23. The system according to Claims 10-22, further comprising at least one
14 physiological parameter measuring device that is attachable to the first person for
15 monitoring at least one physiological parameter of the first person, each device
16 having a device identifier and being connected to the respective access station of the
17 cell when it is within the cell.

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19 24. A physiological parameter measuring device comprising:
20 a transducer;
21 a transmitter; and
22 a processor connected to the transducer and the transmitter, the processor being
23 adapted to control the transducer to at least intermittently measure a physiological
24 parameter of a person and to control the transmitter to transmit a reading
25 corresponding to the measured physiological parameter when it is determined that
26 the reading has deviated from at least a predetermined threshold value.

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28 25. The device according to Claim 24, further comprising a receiver connected to
29 the processor and wherein the reading is transmitted only if the processor receives
30 an instruction to do so via the receiver.

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2 26. The device according to Claims 24 and 25, further comprising a housing
3 including:

- 4 a first portion;
5 a second portion; and
6 a flexible medial portion connected between the first and the second
7 portion.

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9 27. The device according to Claims 24-26, wherein the device is a thermometer.

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11 28. The device according to Claim 27 wherein the processor, transmitter and
12 receiver are accommodated within the first housing portion and the transducer is
13 supported on the second housing portion.

14
15 29. The device according to Claim 28, wherein the first and the second portion are
16 bendable towards each other to define a U-shaped device for hooking on a piece of
17 clothing so that the transducer is in contact with the abdomen of a person for
18 measuring a temperature thereat.

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